

IN THE CLAIMS

Please find below a listing of all pending claims. The statuses of the claims are set forth in parentheses. For those currently amended claims, underlined emphasis indicates insertions and ~~strikethrough~~ emphasis (and/or double brackets) in indicates deletions.

Please AMEND the claims as follows:

1-11. (previously canceled).

12. (currently amended) A communication method of performing communications between a communication device and other communication device each capable of performing communications in a plurality of different communication modes, the method comprising:

measuring communication performances of communication between the communication device and the other communication device by communicating between the communication device and the other communication device in each of the plurality of different communication modes, under a plurality of different communication conditions for each of the different communication modes respectively, before performing actual communication;

determining, as a threshold, a communication condition that the corresponding measured communication performance of communication between the communication device and the other communication device in one of the communication modes exceeds a measured communication performance of communication in the other communication mode based on a result of the measurement;

selecting, before performing actual communication between the communication device and the other communication device under a certain communication condition, a communication mode that the communication performance of a communication between the communication device and the other communication device under the certain communication condition of the actual communication exceeds the communication performance of the other communication mode as an optimum communication mode, by comparing the communication condition of the actual communication and the determined threshold; and

performing the actual communication between the communication device and the other communication device in the selected communication mode.

13. (previously presented) The communication method according to claim 12, wherein the communication device is capable of communicating with a plurality of other communication devices,

and

the measuring of communication performances and the determining of the threshold are performed for each of the communication devices.

14. (previously presented) The communicating method according to claim 12, further comprising:

when selecting a communication mode for communicating between the communication device and the other communication device, comparing a size of data to be actually communicated between the communication device and the other communication device and the threshold,

wherein the communication condition is a size of data to be communicated with the other communication device.

15. (previously presented) A communication device capable of communicating with a plurality of the other communication devices in different communication modes, the communication device comprising:

a unit that measures performances of a communication between the communication device and one of the other communication device in each of the different communication modes, under the different communication data sizes respectively, for each of the other communication devices;

a unit that determines, for each of the other communication device, a communication data size that a communication performance of a communication between the other communication device in a first communication mode exceeds a communication performance of communication in a second communication mode and set the determined communication data size as a threshold for the other communication device; and

a unit that selects one of the communication modes that the corresponding communication performance exceeds the communication performance of the other communication mode in an actual communication under a particular communication data size between a particular communication device under a particular communication condition.

16. (previously presented) The communication device according to claim 15, further comprising:

a table that stores relationship between a communication data size and a communication mode to be selected, for each of the other communication devices, based on a result of the determination,

wherein the unit that selects the communication mode refers to, before starting

communication with a certain other communication device, the table to select a communication mode that is suitable for a certain communication data size.

17. (previously presented) The communication device according to claim 15, further comprising:

a table that stores the determined communication data size as a threshold value, and a communication mode to be selected for each of the other communication devices,

wherein the unit that selects the communication mode refers to the table before starting communication with a certain other communication device, and selects a communication mode for communicating with the certain other communication device by comparing a certain communication data size to the threshold value.

18. (currently amended) A computer readable non-transitory medium storing a computer executable program implementing a method causing a computer to perform communications between a communication device and the other communication devices device in a plurality of communication modes, the method comprising:

measuring performances of communication between the other communication device in a plurality of different communication modes under a plurality of different communication conditions respectively, for each of the other communication devices;

determining, for each of the other communication devices, a communication condition that a communication performance of communication between the other communicating device in one of the communication modes exceeds a communication performance of communication in the other communication mode, for each other of the other communication devices; and

selecting a communication mode for actually communicating with a particular other communication device, in which its communication performance under a communication condition of the actual communication exceeds a communication performance of communication in the other communication mode.

19. (currently amended) A method for optimizing communication condition of a communication between a communication device and other communication device, the method comprising:

communicating , on a same communicating line, with the other communication device in both a first communication mode and in a second communication mode that is different from the first communication mode respectively, under a plurality of different communication conditions;

obtaining communication performances for each of the communications with the other communication device;

measuring a communication performance in the first communication mode, and a communication performance in the second communication mode under each of the different communication conditions, before performing actual communication;

determining, based on the communication performances measured under each of the different communication conditions, a communication condition in which a communication performance of the first communication mode exceeds a communication performance of the second communication mode; and

before starting communication with the other communication device in a particular communication condition, selecting, among the first communication mode and the second communication mode, a communication mode corresponding to a particular communication condition and the other communication device, for actually communicating with the other communication device under the particular communication condition, that the communication performance exceeds that of the other communication mode.

20. (previously presented) The method according to claim 19, further comprising;

when selecting a communication mode for communicating with the other communication device, comparing a size of data to be actually communicated with the other communication device and the threshold,

wherein the communication condition is a size of data to be communicated with the other communication device.

21. (currently amended) ~~The method according to claim 19, further comprising: A method for optimizing communication condition of a communication between a communication device and other communication device, the method comprising:~~

communicating , on a same communicating line, with the other communication device in both a first communication mode and in a second communication mode that is different from the first communication mode respectively, under a plurality of different communication conditions;

obtaining communication performances for each of the communications with the other communication device;

measuring a communication performance in the first communication mode, and a communication performance in the second communication mode under each of the different communication conditions;

determining, based on the communication performances measured under each of the different communication conditions, a communication condition in which a communication performance of the first communication mode exceeds a communication performance of the second communication mode; and

before starting communication with the other communication device in a particular communication condition, selecting, among the first communication mode and the second communication mode, a communication mode corresponding to a particular communication condition and the other communication device, for actually communicating with the other communication device under the particular communication condition, that the communication performance exceeds that of the other communication mode;

storing the determined communication condition, as a threshold, for each of the other communication devices device; and

referring to the stored threshold when selecting the communication mode to communicate with the other communication device.

22. (currently amended) ~~The method according to claim 19, further comprising: A method for optimizing communication condition of a communication between a communication device and other communication device, the method comprising:~~

communicating , on a same communicating line, with the other communication device in both a first communication mode and in a second communication mode that is different from the first communication mode respectively, under a plurality of different communication conditions;

obtaining communication performances for each of the communications with the other communication device;

measuring a communication performance in the first communication mode, and a communication performance in the second communication mode under each of the different communication conditions;

determining, based on the communication performances measured under each of the different communication conditions, a communication condition in which a communication performance of the first communication mode exceeds a communication performance of the second communication mode; and

before starting communication with the other communication device in a particular communication condition, selecting, among the first communication mode and the second communication mode, a communication mode corresponding to a particular communication condition and the other communication device, for actually communicating with the other communication device

under the particular communication condition, that the communication performance exceeds that of the other communication mode;

storing a relationship between a communication condition and a communication mode to be applied for a communication with the other communication device;

wherein when selecting a communication mode, referring to the stored relationship and determining a communication mode that corresponding to a certain communication condition.

23. (previously presented) The communication method according to claim 12, wherein one of the communication performances of communication is communication speeds of the communications between the other communication device under the different communication conditions, and

the communication mode in which corresponding communication speed is faster than that of the other communication mode under the communication condition of the actual communication is selected as the optimum communication mode.

24. (previously presented) A communication method of performing communications between a communication device and other communication device, the method comprising:

communicating with the other communication device to evaluate communication speed, the communication being performed in a plurality of different communication modes respectively, by varying communication data size;

measuring communication speed of each of the communication modes under each of the varied communication data size; and

storing into a memory information indicating the measured communication speed of each of the communication modes and corresponding communication data size.

25. (previously presented) The communication method according to claim 24, the method further comprising:

determining a communication data size in which a communication speed in one of the communication modes exceeds a communication speed in the other of the communication modes as a threshold based on the measured communication speed;

wherein information indicating the determined threshold and the communication mode to be selected in accordance with communication data size of an actual communication.

26. (previously presented) The communication method according to claim 24, the method

further comprising:

- determining, for each of the communication data size, a communication mode in which corresponding communication speed exceeds communication speed of the other communication mode;

- wherein information indicating correspondence between the determined communication mode and the communication data size is stored into the memory.

27. (previously presented) The communication method according to claim 25, further comprising:

- comparing the threshold stored in the memory and a communication data size of an actual communication to be performed between the other communication device;

- selecting, before performing the actual communication, one of the communication modes from the memory based on the result of comparison; and

- performing the actual communication in the selected communication mode.

28. (previously presented) The communication method according to claim 26, further comprising:

- determining communication data size of an actual communication to be performed between the other communication device;

- selecting, before performing the actual communication, a communication mode relating to the determined communication data size from the memory; and

- performing the actual communication in the selected communication mode.